

Article

An Analysis of Transaction Costs Involved in the Urban Village Redevelopment Process in China

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Abstract: A well-designed institutional arrangement for urban village redevelopment projects (UVRPs) must consider transaction costs, but academic papers discussing it from the perspective of transaction cost economics are lacking. This paper applies theory of transaction cost economics to analyse the types and sizes of transaction costs and who bears these costs during redevelopment when implementing UVRPs in China. This paper finds that transactions in UVRPs have high asset specificity, high uncertainty and low frequency, which easily results in high levels of transaction costs. Based on 439 UVRPs collected from seven cities, this paper finds that UVRPs implemented with top-down institutional arrangements remain prevalent in China. Based on semi-structured interviews with participating parties, this paper proves that the sizes and types of transaction costs and the distribution of these costs borne by different participating parties vary with the change of stage under dissimilar institutional arrangements. This implies that a high level of transaction costs at one stage does not necessarily mean the costs stay high at another stage. Transaction costs have essential implications for process efficiency, so policymakers need to consider transaction costs and use hybrid institutional arrangements to enhance the efficiency and sustainability of policies.

Keywords: urban village; transaction characteristics; transaction costs; institutional arrangements; China



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1. Introduction

The dual land system that resulted from the 1982 land reform makes the Chinese land situation unique [1]. A dichotomy has existed between the state ownership of urban land and public ownership of rural land ever since [2]. Urbanization in China often takes place by penetrating spatially into rural villages, where land is collectively owned [3]. Urban villages are often regarded as temporary entities with undesirable urban planning and governance [4]. Combined with the negative social externalities that urban villages emit [5], the Chinese government has implemented large-scale urban village redevelopment projects (UVRPs) in recent years to replace shabby entities with formal urban neighbourhoods [6,7]. This phenomenon is in line with Kochan's argument that urban planners will ultimately eradicate urban villages in urbanization [8]. UVRPs have stimulated rapid urban development, which plays a great role in economic growth and modernization [9].

The end of urban villages is a complicated land development, including property exchange and property reallocation [10]. Defining property rights is the foundation of property economics and property theory. Property rights usually consist of rights to use an asset, earn rental income from an asset and alienate or sell an asset [11]. The characteristics of property rights include exclusivity, inheritability, transferability and

enforcement mechanisms [12]. Property rights play an essential role in abating transaction costs and stimulating economic growth [13]. Ullrich argued that in terms of property rights, transactions include exchange transactions, contract transactions and transactions with externalities [14]. Property rights can increase certainties in human interaction, but this does not mean that property right regimes are economically efficient in practice [15]. In terms of property rights in urban villages in China, indigenous villagers do not own the land, but they have the right to use certain areas of land allocated by villagers' committees (VCs). Therefore, villagers are entitled to build a house for self-living. The legality of self-built housing is not well defined, especially for housing constructed in earlier years. VCs have the right to allocate some parcels of land to indigenous villagers but have no right to sell the land use rights to outsiders to earn profits. Phrased differently, transferring land use rights for collectively owned rural land is prohibited on the market [16]. Therefore, the property rights to collectively owned rural land are ambiguous and incomplete in China during urbanization [17].

New institutionalists have argued that when property rights are not well defined, transaction costs will increase. Property rights that are not well defined create rent-seeking activity amongst village cadres during land reallocation [18]. Although much literature has focused on the redevelopment of urban villages, including the beneficial functions that urban villages serve as social communities [19,20], the institutional arrangement for urban village redevelopments [21,22], the driving factors to redevelop urban villages [7] and the power relations during the urban village redevelopments [23], academic papers rarely discuss UVRPs through the perspectives of transaction cost economics to evaluate the efficiency of urban village redevelopment. A well-designed institutional arrangement for urban village redevelopment must consider transaction costs. To fill the research gap, this paper analyses the redevelopment of UVRPs by incorporating the theory of transaction cost economics. The main objectives of this paper are to analyse what types and sizes of transaction costs arise at each stage of UVRPs and identify the distribution of transaction costs borne by different participating parties. The research findings are expected to propose some suggestions to economise transaction costs, therefore smoothing the process of UVRPs.

2. Literature Review

The relationship between institutions and transaction costs is often overlooked by Pigouvian welfare economics [24]. Transaction cost economics has evolved to compensate for this limitation. The basic analysis unit of such theory is the transaction [25]. Transactions take various forms of activities, from private to public sectors [26]. The attribute of transactions affects the size of transaction costs. The concept of transaction cost was first used by North to introduce the firms in the market [27]. However, a theoretical consensus on the definition of transaction costs remains lacking. Researchers from different perspectives have suggested various explanations. For instance, some researchers regard transaction costs as the costs of exchanging ownership titles [28], so the costs associated with defining, transferring and securing property rights should also be included [29,30]. Some scholars argue that transaction costs are not restricted to the transactions involved but also comprise the costs of monitoring and enforcing agreements [15]. Others even extend the definition of transaction costs to the ex-ante costs of searching for a partner with whom to exchange and negotiating with potential co-operators to reach an agreement [25,31]. Therefore, transaction costs consist of the costs of arranging a contract ex-ante and monitoring and enforcing that contract ex-post [32–34]. Later, the concept of transaction cost was extended to institutional analysis in the public sector [35], and it can be defined as the costs of the resources utilized to create and apply policy [30].

The various definitions of transaction costs offer opportunities for formulating various research programmes [36]. For instance, Alexander used transaction cost theory to account for land use planning and development control in Israel [26]. Reeves demonstrated that a substantial degree of conflicts occurring in some school–contractor relations are caused by

the sources of transaction costs [37]. Cho used the transaction cost framework to analyse the housing redevelopment in Korea, in which hybrid forms of governance are aligned with the relevant transactions [24]. Hastings and Adams posited that the low usage of the Land Ordinance Cap 545 phenomenon in Hong Kong could be attributed to the high transaction costs incurred during land assembly [38]. For the four cases of transferable development right programmes that occurred in the US state of Maryland, some scholars analysed the effects of transaction costs arising at each stage of this process to improve policy design and implementation [39]. Williamson's theory often assumes that institutions should be the dependent variable, and transaction costs should be the independent variable [40]. Such a viewpoint echoes the findings of some researchers that high transaction costs can lead to ineffective institutional design when studying urban redevelopment in Taipei City [10]. However, North asserted that institutions respond to transaction costs and are subject to transaction costs that he calls transformation costs [15]. North's viewpoint echoes the findings that the state-led institutional arrangement of urban village redevelopment in Shenzhen has resulted in a large number of time-consuming transactions and impeded redevelopment [41]. Other scholars prove that institutions considerably affect transaction costs by using project duration and conflict levels to assess the efficiency of institutions of UVRPs [42,43].

Despite its wide application in the public sphere, criticism has also arisen because no consensus exists on the proper approach to evaluating transaction costs [44]. The reasons for the difficulty in measuring transaction costs may be attributed to the lack of proper data [45] or the unclear empirical validity of transaction costs [46]. However, whether measured or not, transaction costs shed a heuristic light into the analysis of the efficiency of institutions [47]. In essence, every story about the reasons for market failures is relevant to transaction costs, as high transaction costs can further impede voluntary trades between parties [48]. Therefore, relevant transaction costs need to be considered and identified when evaluating the efficiency of institutional arrangements [39]. Some scholars analyse urban village redevelopment from the perspective of discourse politics [49]. Others used the theory of growth coalition to explain urban village redevelopment by analysing different local political structures in three villages in Zhuhai, China [50]. However, such theories cannot evaluate the efficiency of policy design and policy implementation processes. Researchers must identify the transaction costs of urban village redevelopment under different contexts and institutions (e.g., policies); as Arrow asserted, 'it should be a major item on the research agenda of theory of public goods and indeed of the theory of resource allocation in general' [51]. To identify the concept of transaction costs, Buitelaar summarized different costs in the production process and designed an effective method to determine the concepts of transaction costs by distinguishing them from production costs [47]. Similarly, transaction costs involved in the process of UVRPs can be identified by differentiating them from the production costs involved. The classification of transactions can differ when applying the transaction cost approach to different studies. The typology of transaction costs is essential for measurement and policy design [30]. This reason is why this paper adopts transaction cost theory to analyse UVRPs in China.

3. Transaction Characteristics of UVRPs in China

In this section, this paper analyses the transaction characteristics of UVRPs in China. The characteristics of transactions can be described as asset specificity (independence), frequency (timing) and uncertainty [52], which may entail the involved parties facing various hazards [26,53]. Transaction costs are raised to enhance the information available and abate uncertainty for the involved parties. In the process of UVRPs, these three dimensions have specific characteristics that will be elaborated as follows.

Asset specificity is a 'specialized investment that cannot be redeployed to alternative uses or by alternative users without a loss in productive value' [40]. Phrased differently, asset specificity often leads to non-standard contracting and idiosyncratic exchange [54]. Thus, high asset specificity entails involved parties spending more time and effort learning

new knowledge or acquiring new information to make a specific contract. Moreover, highly asset-specific services are difficult to adapt to other uses [55]. Some scholars posit that asset specificity can be categorized into site specificity, information specificity and resident specificity when studying urban renewal decision making [56]. Similarly, in the process of UVRPs, there is site specificity; every piece of land and housing is distinctive and immovable, which makes it almost irreplaceable by other pieces of land. Urban planning sometimes requires a specific site for development. The location of affected urban villages cannot be changed. Moreover, the number of participants, such as local authorities, private developers and affected villagers, is often limited. Therefore, UVRPs involve a high level of asset specificity. Some scholars argue that the compensation and relocation policies of UVRPs are heterogeneous in China, which indicates high asset specificity during redevelopment [42]. High asset specificity entails government staff being knowledge specific. Affected villagers and VCs often only engage in one UVRP, so they also lack the experience to deal with government staff and private developers. The unfamiliar relationship may require more time to collect information and negotiate with them to achieve a consensus contract. Taken together, the asset specificity of UVRPs is high, which easily leads to the large size of transaction costs.

Frequency generally refers to how often transactions recur. Frequent and recurrent transactions can reduce transaction costs because the redeployment of relevant knowledge and skills can enhance the capacity to standardize processes and contracts [57]. Although UVRPs are implemented widely in contemporary China, it does not mean that the involved parties, especially the initiating party, have accumulated the experience and knowledge to facilitate an efficient, smooth process. The outcomes of social disputes, conflicts and delays during redevelopment often occur in practice. Once again, most participants in one UVRP are different from those in another. Once a project is complete, most participants will never have the chance to participate in another. Even though some private developers and government staff participate in several UVRPs, the asset specificity of UVRPs entails an amount of effort to collect information equal to or more than that of the previous project. Asset specificity and frequency interact with each other; Coggan et al. stated that 'Frequency will only reduce transaction costs if repeatable rules and processes can be developed, which is difficult when transactions are asset-specific' [58]. Together with the complexity and some historical problems, sometimes the standard rules and policies (e.g., compensation and relocation policies) within one district can produce different levels of transaction costs in different UVRPs. Therefore, the low frequency of UVRP transactions could instead increase transaction costs for administrators.

Uncertainty is related to the bounded rationality and opportunism of involved parties [47]. Bounded rationality means that individuals have limited ability to foresee all contingencies even if they are rational [59]. Opportunism emerges as selfish individuals offer false or incomplete information to redirect profits from vulnerable partners [60]. Bounded rationality and opportunism lead to uncertainty prevailing over most transactions. All these increase the costs of information collection and the effort required to draft complete contracts or necessitate increased monitoring to cope with hazards arising from uncertainty [58]. Construction projects are confronted with uncertainty, which has a positive effect on transaction costs [61]. UVRPs always involve multiple parties, and the total number of participants is vast. The incomplete or asymmetric information and bounded rationality of the involved parties (e.g., policymakers and private developers) and the opportunism of affected villagers increase the uncertainty of the project. However, the institutional arrangements of UVRPs decide which parties (generally denoted as the government or VCs) are empowered to implement the project, so the empowered parties need to verify and approve all the trades [22]. In contrast, the empowered parties generally bear the costs of minimizing the uncertainty produced by opportunism and bounded rationality.

Overall, this paper simultaneously visualizes three transaction characteristics of Chinese UVRPs to make them more easily understood. The upper right corner of Figure 1 shows that the transaction characteristics of UVRPs in China during redevelopment have

high asset specificity, high uncertainty and low frequency, which easily leads to a high level of transaction costs.

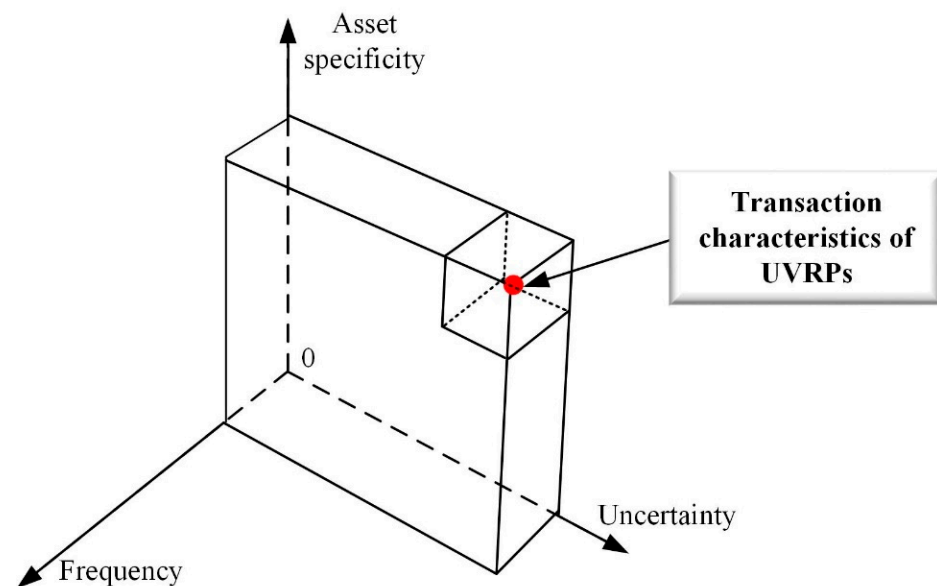


Figure 1. Transaction characteristics of UVRPs.

4. Research Methodology

4.1. Analytical Framework

The analytical framework of this paper is shown in Figure 2. After illustrating the transaction characteristics of UVRPs, the reasons why transaction costs are produced during redevelopment is easy to understand. Some studies prove that different institutional arrangements produce varied sizes of transaction costs [42]. The next step is to classify the institutional arrangements of UVRPs because it directly determines which parties participate in the redevelopment projects and what roles they take. Villagers' voluntary participation is vital to smooth the redevelopment of UVRPs. If villager representatives can participate in policymaking, it can entail affected villagers forcing the implementation of policies that favour them. From a decision-making perspective, Yuan et al. classified the institutional arrangement of UVRPs into top-down and bottom-up [7]. In a top-down institutional arrangement, UVRPs are led by the local government, which implies that villager representatives have no power to influence the outcome of policymaking. In bottom-up institutional arrangements, UVRPs are led by VCs, which shows the opposite phenomenon; the VCs have the rights to implement the UVRPs. This paper adopts this classification of institutional arrangement, under which the size and typology of transaction costs will be analysed in the Results section. This paper evaluates the size of transaction costs through the dimensions of social conflicts and project duration, which have been used in other studies [22,43].

No matter what institutional arrangement is adopted, UVRPs always involve transferring the property rights of land and self-built housing to the state. It is similar to a contract stating that a consensus should be achieved between at least two participating parties. To analyse what types and sizes of transaction costs arise at each stage of UVRPs and identify the distribution of transaction costs borne by different participating parties, the next step is to classify the whole redevelopment into several stages. According to theory of project management, this paper summarizes the redevelopment process of Chinese UVRPs into 10 stages: project application, site selection, requisition schemes, announcement, measurement and evaluation, contracting, moving out, demolition, construction and relocation. However, the stages of UVRPs do not take place strictly in chronological order but overlap to a certain extent, and some later stages (e.g., construction) may occur prior to

the stages (e.g., moving out) listed before. The sequence of the stages largely depends on the institutional arrangement of UVRPs.

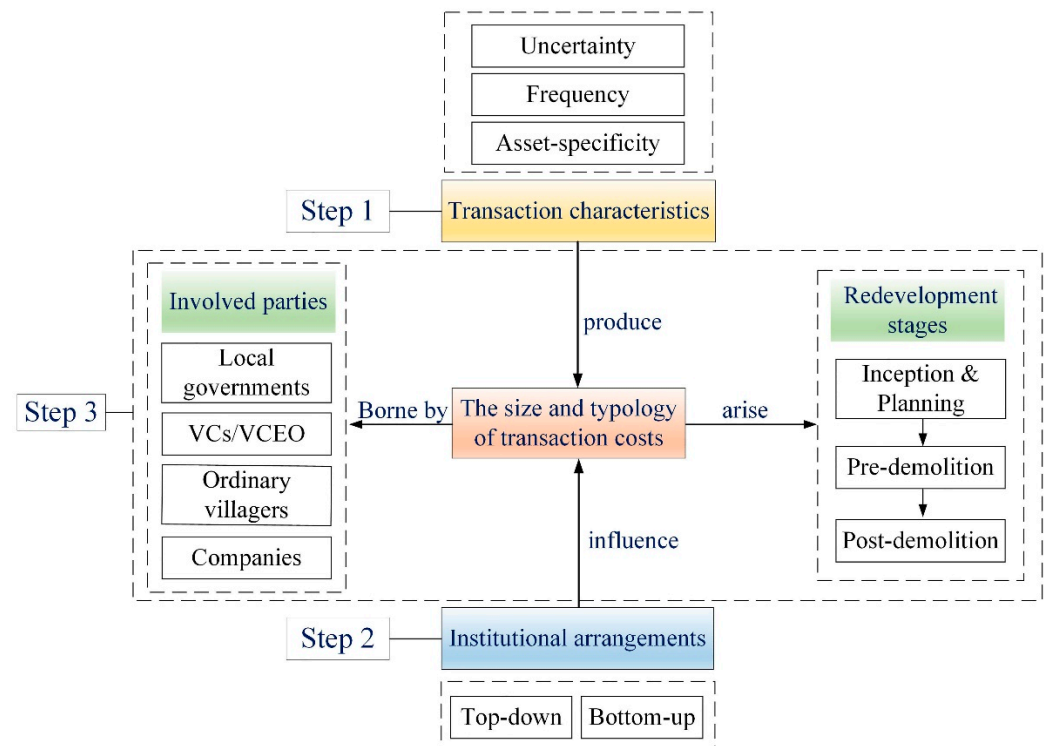


Figure 2. Analytical framework.

To interpret this more clearly from the transaction cost perspective, the 10 stages need to be further classified into three primary steps: inception and planning, pre-demolition, and post-demolition. The implementation sequence and relationship between each stage are shown in Figure 3. Inception and planning, consisting of the stages of project application, site selection and requisition schemes, mainly involve the costs of information collection and policymaking; pre-demolition includes the stages of announcement, measurement and evaluation, and contracting, primarily involving the costs of policy enforcement, ex-ante contracting, and contracting; and post-demolition consists of the stages of moving out, demolition, construction and relocation, mainly involving the costs of contracting enforcement and monitoring. The Results section will analyse the size and type of transaction costs that arise at each stage of UVRPs and identify who bears these costs.

4.2. Data Collection

This paper examines the transaction costs arising at different redevelopment stages under dissimilar institutional arrangements, so including several cities is important to learn about this relationship in diverse contexts. The Yangtze River Delta, the Pearl River Delta and the Bohai Rim encompass a dozen or so cities, which have become the so-called megacity regions in China [62]. With the expectation of generating positive socio-economic and environmental effects, large-scale UVRPs have been implemented with numerous redevelopment strategies in China's three megacity regions [63,64]. Therefore, selecting cities located in the three megacity regions makes sense. Seven cities were visited: Guangzhou, Wenzhou, Taizhou, Yiwu, Ningbo, Hangzhou and Beijing. Fieldwork was conducted from 1 May 2017 to 1 December 2017.

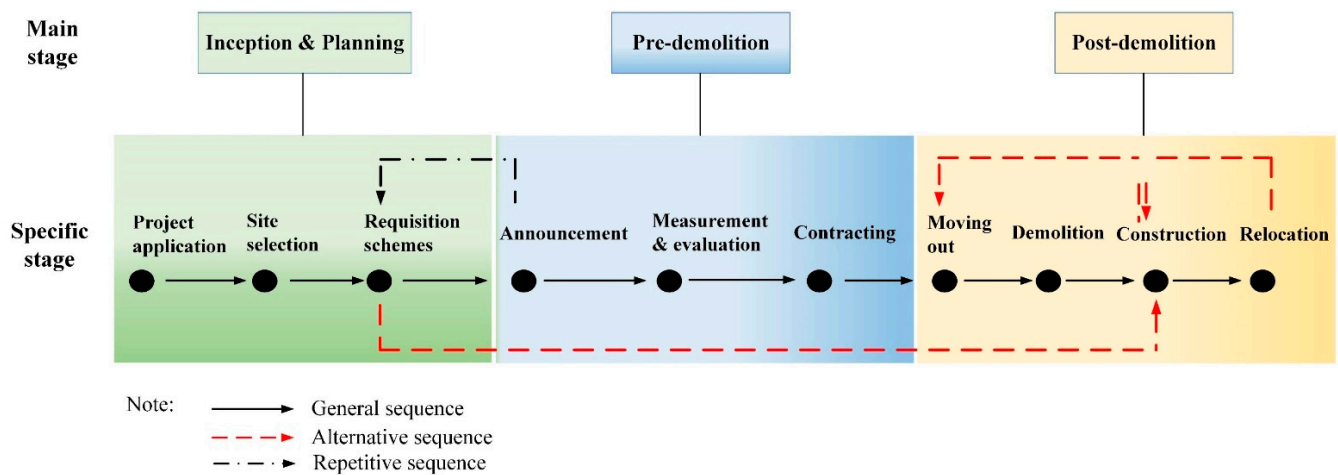


Figure 3. The redevelopment process of UVRPs.

Distinct types of transaction costs occur at different stages of project implementation and are borne by various agencies or involved parties. To understand how UVRPs are implemented and what types of transaction costs arise at each stage of redevelopment, semi-structured interviews with government staff and affected villagers who participated in UVRPs in seven cities located in the eastern regions of China were conducted. This interview method was chosen as it enabled the tailoring of questions to respondents' positions, experiences and interview context [65]. A total of 37 government departments and 11 villages were visited. Table A1 lists 48 key organisations or villages where interviewees provided detailed, useful information for this paper. Approximately 100 participants were interviewed (lasting 60–90 min), with 2–3 interviewees from each government department and village visited. The contents of the interviews are different for government officials, ordinary villagers and VCs. For ordinary villagers and VCs, frequently asked questions include the following: How was the redevelopment project implemented in your village? What challenges did you face when implementing the UVRP? How did these challenges (e.g., conflict, holdout problems) arise? For government officials, the frequently asked questions include the following: What principles did the local government use to determine whether a UVRP should be implemented or not? What were the processes of policy formulation and policy implementation? What roles did you play in implementing a UVRP? What challenges did you face when implementing the UVRP? How did these challenges (e.g., conflict, holdout problems) arise, and how were these challenges finally solved? This paper does not provide the acronyms of the interviewees reported in this paper to protect their identities, because urban village redevelopment is a sensitive topic in mainland China. The data were recorded and coded after the interview. Then, the interviews were analysed and coded using qualitative software NVivo 12 based on the identified transactions. Relevant urban village redevelopment policies were also collected to complement the interview and ensure the reliability of the information. Primary and secondary data can help us understand how UVRPs are implemented and how the participating parties interact during the whole redevelopment process.

To explore what institutional arrangements are adopted to implement UVRPs in China, data on 439 UVRPs were collected in field sites. The distribution of the institutional arrangement is illustrated in Figure 4. It reveals that UVRPs implemented with top-down institutional arrangements (394 villages or 89.75%) are prevalent in contemporary China. This finding means that the Chinese government still has a dominant role in urbanization. Nevertheless, UVRPs implemented through bottom-up institutional arrangements account for only 10.25%. Bottom-up institutional arrangements indicate the empowerment of VCs and is only adopted in few cities in China.

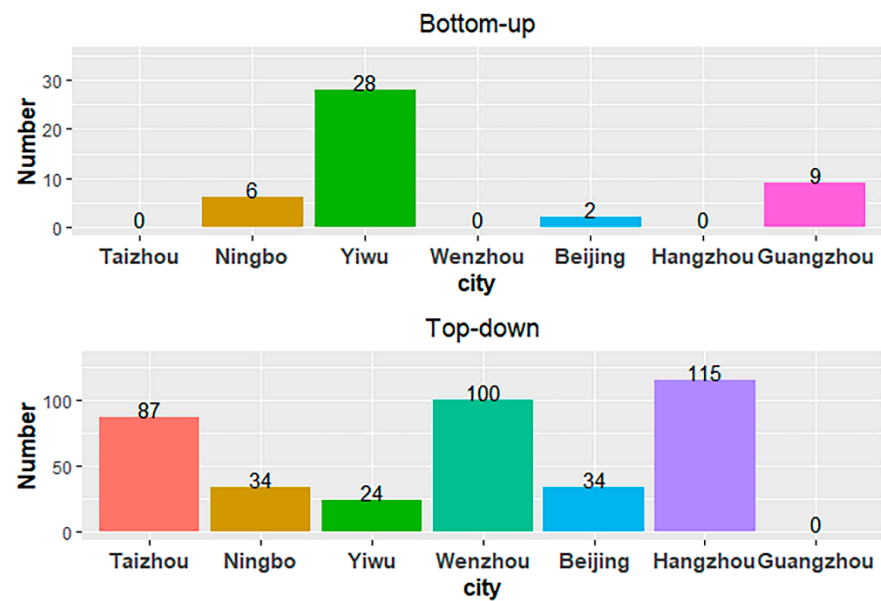


Figure 4. Distribution of institutional arrangements of UVRPs in visited cities.

5. Results

To understand the typology of transaction costs involved in UVRPs and who bears these costs better, this paper elaborates on the activities, involved parties and transaction costs incurred at each stage. This paper summarizes such information mainly based on the interviews and redevelopment policies. The specific stage in Table 1 is based on the redevelopment of UVRPs classified in Figure 3. Table 1 shows that all stages include the costs of repetitive negotiations, conflict control and resolution throughout the whole process, especially during the main phase of pre-demolition, which involves various interests of many affected indigenous villagers. Some common, evident ones are listed as examples because revealing all the transaction costs involved in UVRPs is practically impossible and theoretically unnecessary.

5.1. Inception and Planning

5.1.1. Project Application

Prior to initiating UVRPs, there is a compulsory process of planning permission, where the application for land use first needs to be approved by the government planning department. At this stage, transaction costs arise due to the continuous intergovernmental negotiations. Implementing UVRP often needs cooperation with different government departments, such as the planning department, construction department and land resource bureau. According to the interviewees from government departments,

‘The city planning department sometimes rejects the planning scheme submitted by the district government or puts forward some requirements to revise the scheme to coordinate with other city projects.’

Applications and revisions for project approval lead to the increasing size of transaction costs borne by the government.

Table 1. Identification of transaction costs in UVRPs.

Specific Stage	Activity	Involved Parties	Transaction Costs
Project application	Legal designation of land use, planning permission	Different departments of government at various levels, including planning department, construction department and land resource bureau	Costs of continued negotiations, rejection or revision of land use planning and site selection; long-term approval process; information requisition
Site selection	Name, number and area of urban village determination; pre-investigation of the consent rate of affected villagers	Government officials from the city, district (country) and sub-district levels; VCs/Village collective economic organisation (VCEO)	Costs of information requisition and negotiation
Requisition schemes	Compensation and relocation policies, rewarding policies	Top-down: land resource bureau, construction department or urban village redevelopment office; Bottom-up: VCs/VCEO	Costs of creating policies, information requisition, continued negotiation and revision
Announcement	Mobilization meeting; announcement of selected evaluation companies; provision of redevelopment information to affected villagers, including compensation and relocation policies; measurement date, contracting date and moving out date	Local governments, VCs/VCEO, ordinary villagers	Costs of information requisition and negotiations with affected householders; conflicts of interest lead to the revision of the associated policies
Measurement and evaluation	Measuring the size and area of the original self-built houses, evaluating the value of the original self-built houses, determining the allocated area	Local government, VCs/VCEO, ordinary villagers, evaluation company	Costs of measuring and evaluation, information requisition and negotiation, conflict resolution
Contracting	The local government (top-down) or VCs/VCEO (bottom-up) establishes a contract with the affected householders	Local governments, VCs/VCEO, ordinary villagers	Costs of making the contract, conflict resolution, signing the contract (e.g., time, human resources)
Moving out	The villagers who signed the contract need to move out of their houses on the given date	VCs/VCEO, ordinary villagers, local government	Costs of conflict resolution, holdout problems (e.g., time, human resources)
Demolition	The government or VCs/VCEO select the demolition companies on the open market; demolition of the original self-built houses	Local government or VCs/VCEO, demolition companies	Costs of finding appropriate companies, conflict resolution, holdout problems
Construction	The government or VCs/VCEO select the construction companies or private developers on the open market; construction of RHB for resettlement and temporary relocation housing for the elderly according to the consensus contract	Local governments, VCs/VCEO, construction companies, or private developers	Costs of finding appropriate companies; continued negotiation with the affected householders about plot ratio, floor plans and greening rate of RHB. The costs may occur before signing the contract in some cases because the villagers want to decrease uncertainty
Relocation	Relocating affected villagers based on the relocation policies, e.g., drawing lots irrelevant to contracting date, drawing lots relevant to contracting date, selection fees	Local governments, VCs/VCEO, ordinary villagers	Costs of conflict resolution about the floor plan, stories and the location of the housing or apartment. In some cases, the relocation stage is prior to the construction stage

5.1.2. Site Selection

When the government approves the land use planning for the UVRP, this implies that the location of the urban village for demolition and reconstruction is determined. The number of participating parties in the requisitioned area influences the size of transaction costs. Generally, transaction costs increase when a large number of households need to exchange their property rights, because holdout problems are apparent with an increasing number of households [66]. The government bears the information collection costs that involve the pre-investigation of the participating willingness of affected villagers. According to the interviewees from government departments,

‘Following the achievement of a consent rate of around 95% or two-thirds of villagers, a UVRP can be officially initiated.’

The motivations to implement a UVRP are various, including city image enhancement, construction of industry parks for economic development and construction of public facilities for public interests. Different motivations might lead to dissimilar institutional arrangements to implement UVRPs, which in turn affects the size of transaction costs in the later stage.

5.1.3. Requisition Schemes

This stage involves making the relevant policies regarding UVRPs in the selected urban villages. The level of transaction costs is largely affected by the costs of creating and implementing the associated policies (i.e., compensation and relocation policies, rewarding policies and relocation sites). The process and number of participating parties vary with different institutional arrangements. If UVRPs are implemented through a top-down approach, the local government first designs policies for compensation and relocation and then invites the village cadres (i.e., the village head, VCs and village representatives) to discuss whether the policies are acceptable [22]. The costs may involve several rounds of formal or informal negotiations throughout the continuous bargaining. When conflicts of interest occur, the local government sometimes compromises to revise the policies to become more inclusive to alleviate the conflicts. Therefore, the government bears the most transaction costs in top-down institutional arrangements. However, in terms of bottom-up institutional arrangements, VCs or village collective economic organisations (VCEOs) are empowered to design policies for compensation and relocation based on the general policies required by the local government [67]. As VCs and VCEOs are more familiar with the affected villagers, and the policymaking is very relevant to their interests, reaching a consensus on compensation and relocation policies is expected to be much easier [66]. Despite lacking local government intervention at the policymaking stage, the local government needs to approve the final designed policies. The location and design of relocated (high-rise) buildings need to comply with the city’s general planning (e.g., plot ratio and relocation sites). The outcomes, in turn, affect the transaction costs in the announcement stage if affected villagers are discontent with the relocation sites, for example.

5.2. Predemolition

5.2.1. Announcement

The initiation of UVRPs begins with the official announcement of the project. The project implementer varies with the different institutional arrangements adopted. The local government organizes a mobilization meeting to announce the UVRP to affected villagers and inspire them to support the project in top-down institutional arrangements, whereas the VC/VCEO does such things in bottom-up institutional arrangements. In some cases, affected villagers are empowered to select qualified evaluation companies to evaluate the value of their original self-built houses on the market. If so, the information requisition costs are borne by the affected villagers. In other cases, the local government bears such costs because it needs the government to select the evaluation company via

public bidding on the market. Moreover, the announcement includes detailed information: designed compensation and relocation policies, associated reward policies, measurement and evaluation date, contracting date and moving out date. Openly providing villagers information can reduce their feelings of uncertainty towards UVRPs and improve their sense of fairness. In spite of ‘sunshine policies’, the content of policies might conflict with the interests of a few affected villagers, as Yuan et al. found in the UVRPs in Wenzhou, leading to holdout problems or even death during redevelopment [7]. Thus, the associated transaction costs, such as conflict control and continued negotiations, arise in settling the conflicts of interests. According to the interviewees of villagers, ‘*Social disputes are often caused by the unclear definition of property rights.*’ Therefore, how legal property is delineated, one of the most critical factors in affected villagers’ direct interests, can further affect the transaction costs at a later stage.

5.2.2. Measurement and Evaluation

The transaction costs at this stage, as mentioned earlier, are largely influenced by the specific information announced at the announcement stage. If some affected villagers are dissatisfied with the compensation and relocation policies, the transaction costs increase at this stage. During the fieldwork, the findings revealed that some affected villagers impeded the appraiser from entering their houses to measure their housing area. Uncooperative actions result in the increase of transaction costs. Persuading all villagers to agree to the contract takes a long time. According to one villager interviewee,

‘The local government sometimes searches for information regarding the householders’ relatives to find whether any of them has worked in the relevant government department or state-owned enterprise under the top-down institutional arrangement. If so, these relatives are also required to join the team to persuade the householders to sign the contract.’

Such a process involves high costs of information requisition. Monetary reward policies are also used as supplementary strategies to encourage householders’ cooperation in implementing UVRPs. In terms of evaluation, the evaluator generally tells householders in person about the market value of their self-built houses. If affected householders are dissatisfied with the evaluation report, they often make great efforts to bargain with the evaluator to gain more compensation. However, if villagers gain nothing and lose monetary rewards, the unsettled issues increase transaction costs in the following contracting stage.

5.2.3. Contracting

The upcoming contracting stage follows the stage of measurement and evaluation; that is affected villagers make a contract for compensation based on the evaluation of their original self-built house value with the project implementer (local government or VC/VCEO). The concept of contract is central to neo-institutional economics, which specifies what rights are being transferred and on what terms [11]. The given period of contracting is designed by the local government/VCs to speed up implementation. In most cases, the strategy of certain monetary rewards is employed to encourage householders to sign the contract within the given contracting period [7]. The contract signed by the householders indicates that they agree to exchange the property rights of their original houses and move out of their houses by the given date. Once again, the number of affected householders and their conflicts of interest as well as the content of associated policies are important factors influencing the size of transaction costs [43]. In most cases, holdout problems may be attributed to unsettled issues about the value and legal area of their original houses. Conflicts are often caused by the calculation method for the relocation area that the ‘nail householders’ deem unfair. Such a phenomenon echoes the findings of Yuan et al. that the Wenzhou government only counts the legal area of villagers’ houses based on 1994 aerial photographs [7]. In other cases, holdout problems may be ascribed to the ‘fluke mind’ that the ‘nail householders’ want to bargain for more benefits from the UVRPs, even if the majority of their neighbours (over 90% or 95%) have signed the contract. According to the interviewees from the government department,

‘Some villagers grasp this chance to bargain for more benefits from the redevelopment process; this may be their last chance in their life.’

Therefore, the transaction costs involved in settling the last several ‘nail householders’ are extremely high, which might delay the project or even lead to violent conflicts between ‘nail householders’ and project implementers.

5.2.4. Moving Out

Subsequent to the contracting stage, the stage of moving out soon occurs; that is, the householders need to transfer their property rights to the implementer, as stipulated in the contract. Sometimes, the size of transaction costs is highly relevant to the amount of production costs. Some scholars argue that production costs, such as certain monetary rewards, are employed as a supplementary method to encourage householders’ moving-out behaviour, which is expected to reduce the size of the transaction costs involved [7]. Therefore, before or during the announcement stage, the high-rise relocation buildings start to be built first after achieving consensus about the relocation site. In such a case, affected villagers need not move out of their self-built houses until they can be moved to the relocated high-rise buildings. The construction of relocated buildings before contracting can reduce villagers’ uncertainty about the quality of the buildings and the relocation time [43]. As a result, the moving-out process is expected to be smooth. However, in some cases, the parcel land of self-built houses in villages urgently needs to be readjusted for other purposes, such as public interests or relocated high-rise buildings. After the contracting stage, generally, a few days are set aside to let the householders find another place to rent and move out of their self-built houses. According to the interviewees,

‘It is hard for the elderly villagers to rent a house as landlords are afraid that the elderly villagers would die in their house.’

Other studies also found that whether the government builds temporary relocation housing for the elderly is amongst the main causes of social disputes based on the cases in Wenzhou [7]. As a consequence, the costs involved in this stage are also closely related to the outcomes of the contracting stage. More specifically, high transaction costs occur at the contracting stage when persuading householders to sign the contract, which normally is expected to mitigate the size of transaction costs in the moving out stage.

5.3. Post Demolition

5.3.1. Demolition

At the demolition stage, the costs involve the information-searching actions that the local government or the VC/VCEO undertake to engage a qualified demolition company via public bidding on the market. However, holdout problems might still not be settled in some cases at the demolition stage. Therefore, other types of transaction costs occur, including the costs of litigation and the defence of property rights. A local government with a demolition permission certificate can use the compulsory power of eminent domain to forcibly demolish the houses of ‘nail householders’ in the name of public interest. However, conflicts between the householders and the local government might be aroused in defence. On the one hand, even if the local government forcibly purchases their property rights, negative externalities are produced after the transactions. According to the interviewees of nail householders,

‘... the local government published an announcement stipulating that the “illegal buildings” will be forced demolished after ten days. But some migrants did business on the ground floor and did not find appropriate housing in such a short period. When the deadline came, the renters still had not moved out and the government forces demolished those houses without moving their personal belongings out. The disputes, therefore, arose. Renters said there was this [gold necklaces] or that [cash], but there was no evidence to prove because everything had been buried. If they told me there were 1 million cash dollars

in their room, should I compensate 1 million for them? Such a dilemma was caused by the government ...

Some interviewees from the surveyed villages complained about the forcible demolition and contracting behaviour of the local government and described it as banditry, which acted like ‘Japanese devils entering the village’. On the other hand, such forcible transactions can expedite urban village redevelopment and generate the positive externalities that UVRPs emit. Nevertheless, not all UVRPs are implemented for public interests without debate. In such cases, the power of eminent domain is not applicable. According to the interviewees from the government department,

‘The local government will leave the last “nail householders” there if continuous negotiations fail in most practices. When new land-use planning for public projects is established, the local government will forcibly demolish their houses legally.’

Although the VC or VCEO has no power to demolish nail householders’ houses forcibly in bottom-up institutional arrangements, it can use various alternative persuasive methods that may be more effective than those of the local government in top-down institutional arrangements [66,67]. Moreover, the last weapon of judicial practice can be utilized by the VC/VCEO to prosecute the ‘nail householders’ at this stage.

5.3.2. Construction

The construction stage usually takes place after the post demolition stage (demolition) but sometimes also after the pre-demolition stage (e.g., requisition schemes or announcements) under different situations. Moving the construction stage earlier can reduce the uncertainty of the project for the affected villagers, which in turn can reduce the costs of negotiation during the whole redevelopment. Nevertheless, the sequence of construction exerts few effects on the size of the transaction costs because the transaction costs are limited to certain activities involving information acquisition and negotiation. Information costs at this stage consist of searching for a qualified construction company or private developer to construct the relocated high-rise buildings and temporary relocation housing. Negotiation costs involve repetitive negotiations about the design of high-rise buildings (e.g., floor plan, orientation, plot ratio, number of parking spaces and greening rates) and other interests that affect householders. Institutional arrangements influence the size of transaction costs. For instance, the local government bears the costs of information acquisition and negotiation when the project is implemented by a top-down institutional arrangement, and the VC/VCEO bears most of the transaction costs in the bottom-up model [22]. Although both institutional arrangements involve three parties’ participation (government, private developers/construction companies and affected villagers) to reach a consensus regarding how to construct and share the interests of redevelopment, each party has a dissimilar extent of experience and power to influence the final decision under different institutional arrangements, and this, in turn, influences the time and effort required for negotiation. In bottom-up institutional arrangements, private developers may have moral risk issues that fail to enforce the contract to build sufficient relocated high-rise buildings to save costs. According to the interviewee of villagers,

‘... there are still around 40 households that have not been relocated, which is the fault of the private developer, Baoli. We do not know why there were not enough apartments to relocate all the households. It can obviously increase the size of transaction costs at the stage of relocation ...’

Generally, the government is more professional in finding and dealing with private developers or construction companies than villagers. The costs of information acquisition and negotiation to deal with private developers are lower than those for the VC/VCEO [7]. However, because the VC/VCEO represents the interests of affected villagers, despite the substantial time and effort involved in negotiating with private developers, the final sharing outcomes might be more favourable to affected villagers [66]. Support policies are supposed to have a low level of transaction costs and be implemented more smoothly.

5.3.3. Relocation

The final stage is relocation. In some cases, transaction costs accumulate rapidly because of social disputes caused by the principle of how to relocate affected villagers to high-rise buildings. Although the relocation principle is illustrated very clearly at the announcement stage, some affected villagers remain unsatisfied with the allocation outcomes. According to the interviewees, with the principle of drawing lots, unlucky affected villagers who are relocated to poor locations in an apartment with unfavourable floors and orientations often express their displeasure during relocation. According to the government staff,

‘Some unruly villagers do not obey the rules articulated in the policy. They even refuse to move in even if we clearly announce the relocation principle at the beginning.’

Increasing costs of conflict resolution are also related to the content of a contract at the contracting stage; that is, the contract merely lists the total relocation area to which affected villagers can be allocated, rather than the specific housing type and its combinations, resulting in frequent gaps between the relocated area in the policy and the relocated area in reality. Settling the combination of different floor plans to gain the maximum benefit always takes a significant amount of time. The conflicts can also be caused by the ‘supportive area’, which some affected villagers cannot purchase, leading to holdout problems [7]. According to the villager interviewee,

‘We have no money . . . but I have no money to buy the “supportive area”. The purchase price is CNY 5000/m². Our self-built house occupies a 170 m² building plot. This site has one floor and another has two floors. According to the compensation policy, the relocation area allocated to us is 510 m² [170 × 3 = 510] and the shared area (gongtan mianji) is equal to 127.5 m² [510 × 0.25 = 127.5] with different amounts of construction costs. This means I need to provide around CNY 3 million to purchase the exchange area. Please tell me how I could provide such a sum of money . . . ?’

In addition, the high-rise buildings are sometimes reported to present quality concerns (e.g., wall leakage). Some affected villagers even refuse to move in and blame the local government for such irresponsible outcomes when the project is government led. In such cases, the government bears the costs of conflict resolution. In bottom-up institutional arrangements, as illustrated earlier, the VC or VCEO might be more effective in solving the conflicts of interest due to the long traditional culture of self-governance in the village [43]. Certainly, some cases also have a very efficient relocation process. These efficient relocation processes may be attributed to the high costs of information acquisition and negotiation about the floor plan preferences and relocation mechanism at or prior to the contracting stage.

6. Discussions and Conclusions

This paper deepens the understanding of UVRPs in China through the perspectives of transaction cost economics. The identification of transaction costs is useful because it can be used to measure the efficiency of institutional arrangements. In terms of the transaction characteristics of UVRPs, this paper finds high asset specificity, low frequency and high uncertainty, which easily result in high levels of transaction costs. This result can explain to a large extent why social resistance to UVRPs proliferates in the form of demonstrations, violent protests and even death. However, different institutional arrangements often have dissimilar sizes of transaction costs based on the argument of North. Therefore, this paper also considers institutional arrangements. From the decision-making perspective, the terms top-down and bottom-up are often used by researchers. Referring to the classification by Yuan et al., this paper empirically proves that top-down institutional arrangements are still prevalent in China, based on 439 UVRPs collected from seven eastern coastal cities.

Participating parties and types of transaction costs generally vary with the alterations of redevelopment stages. Based on personal interviews with government officials and villagers, this paper first summarises the redevelopment of UVRPs into three primary

phases—inception and planning, pre-demolition, and post-demolition, which consists of 10 stages. In the inception and planning stage, the local government plays a very active role in urban planning, which is directly relevant to whether and how a UVRP should be initiated. To abate the hazards and uncertainty of redevelopment, transaction costs arise due to repeated negotiations between different government departments, information requisition of villagers' participation willingness for gaining redevelopment possibility and the cost of policymaking for smooth implementation. The stage of pre-demolition aims to persuade affected villagers to exchange their property rights by formal contracting. UVRPs involve the exchange of property rights for housing and land, during which the transaction costs arise amongst affected villagers, VCs and governments. The transaction costs at the pre-demolition stage mainly comprise the costs of information requisition and negotiation, measurement and evaluation, establishing the contract, and conflict resolution. The post-demolition stage can be regarded as the stage of enforcing the contract. In this paper, the villagers need to move out of their houses, so the land can be used for land readjustment; at the same time, the government or VCs need to allocate certain areas of buildings plots or relocated high-rise buildings to the affected villagers. Transaction costs mainly involve the costs of conflict resolution in the event of failure to enforce the contract, finding appropriate companies and continued negotiations.

This paper evaluates the size of transaction costs through the dimension of social conflicts and project duration, which arise at each redevelopment stage. The evidence is provided by the interviewees. After identifying the possible types and sizes of transaction costs at each stage of UVRPs, we find that a high level of transaction costs at one stage does not necessarily mean that the cost stays high at another stage. This finding echoes the argument of Cho, who suggested that institutions cannot be efficient for an entire social development process [24]. Based on the assumption posited by neo-institutional economists, we cannot say that one institutional arrangement is more efficient than another, but one may be more efficient than another at a certain stage. Although transaction costs do not directly contribute to the outcomes of a redevelopment, they are important for process efficiency. Thus, this implies that policymakers should not use the one-size-fits-all criterion as the basis for policymaking. To smooth the redevelopment process, the advantages of both top-down and bottom-up institutional arrangements should be considered. For instance, the government might be more efficient in finding an appropriate private developer, whereas the VC might be more efficient in conflict resolution. Therefore, local governments are encouraged to implement a mixed institutional arrangement, with varied institutional arrangements employed at different redevelopment stages. Institutional innovation should also be encouraged to achieve sustainable urban village renewal in China. This paper provides a new perspective on UVRPs in contemporary China. The introduction of transaction cost economics provides a good theoretical framework to contribute to research regarding the relationship between institutional arrangements of UVRPs and transaction costs that arise at each stage.

However, due to limited time and knowledge, this paper has some limitations. Firstly, although the observations are collected from seven cities, they are all located in eastern coastal regions. Hence, the applicability of these findings may be uncertain in the middle and western parts of China. Adopting a case-study methodology to compare the typology and size of transaction costs for each redevelopment in future research is necessary because the redevelopment of UVRPs is dissimilar under different institutional arrangements. In addition, this paper uses the outcomes of project duration and violent conflict to reflect the size of transaction costs. The measurement of transaction costs needs to be developed in a more scientific manner to consider more dimensions of the outcomes in future studies.

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Appendix A

Table A1 shows the names of organisations or villages where the interviews were conducted.

Table A1. A list of key organisations/villages.

City	Organisations/Villages	Date
Hangzhou	Demolition headquarters for JJB village	2017/9/14
	Hangzhou city construction committee	2017/9/5
	Hangzhou city land resource bureau	2017/7/31
		2017/9/26
	Shangcheng district construction bureau	2017/9/18
	Shangcheng district land resources bureau	2017/9/27
Ningbo	Dandong sub-district government	2017/11/17
	Danxi sub-district government	2017/11/18
	Dongjiao sub-district government	2017/11/15
	DT village	2017/11/9
	Duantang sub-district government	2017/11/9
	Haishu district old village redevelopment office	2017/11/14
	HJT village	2017/11/18
	Jiangbei district urban village redevelopment office	2017/11/15
	Ningbo city land resource bureau	2017/11/13
	Shiqi sub-district government	2017/11/8
	Xiangshan district construction bureau	2017/11/18
	Xiangshan housing expropriation office	2017/11/17

Table A1. Cont.

City	Organisations/Villages	Date
Taizhou	High-speed railway demolition headquarters	2017/10/26
	Hongjia sub-district government	2017/10/26
	Luqiao district land resource bureau	2017/10/20
	Luqiao district urban village redevelopment office	2017/10/20
	Luqiao sub-district government	2017/10/23
	Shuicheng demolition headquarters	2017/10/25
	Taizhou city construction committee	2017/10/11
	Taizhou city land resource bureau	2017/10/11
	WLP village	2017/10/17
	Xinqian sub-district government	2017/10/19
Wenzhou	DLX village	2017/7/18 2017/7/25
	Wenzhou city construction committee	2017/10/27
	Wenzhou city land resource bureau	2017/10/27
Yiwu	Futian sub-district government	2017/11/1
	Houzhai sub-district government	2017/11/2
	LXT village	2017/10/28 2017/11/5
	Suxi township government	2017/11/3
	XXYX new community	2017/11/2 2017/11/4
	City land resource bureau	2017/10/30 2017/11/6
	Community construction office	2017/10/31 2017/11/3
	Three redevelopments and one demolition office	2017/10/31
	Beijing city planning and land resources committee	2017/11/27
Beijing	DWY village	2017/11/27
	Fengtai district construction committee	2017/11/21
	Lugouqiao township government	2017/11/22
	Tongzhou district land resource bureau	2017/11/24
	YGZ village	2017/11/26
Guangzhou	Liede sub-district government	2017/5/26
	MG village	2017/5/22
	PZ village	2017/5/11
	XC village	2017/5/3

References

1. Xu, Y.; Tang, B.-s.; Chan, E.H.W. State-led land requisition and transformation of rural villages in transitional China. *Habitat Int.* **2011**, *35*, 57–65. [\[CrossRef\]](#)
2. Zhang, Q.F.; Donaldson, J.A. China's Agrarian Reform and the Privatization of Land: A contrarian view. *J. Contemp. China* **2013**, *22*, 255–272. [\[CrossRef\]](#)
3. Zhu, J.M.; Hu, T.T. Disordered land-rent competition in China's periurbanization: Case study of Beiqijia Township, Beijing. *Environ. Plan. Econ. Space* **2009**, *41*, 1629–1646. [\[CrossRef\]](#)

4. Zhang, L.S.; Zhao, S.X.B.; Tian, J.P. Self-help in housing and chengzhongcun in China's urbanization. *Int. J. Urban Reg. Res.* **2003**, *27*, 912–937. [\[CrossRef\]](#)
5. Wu, W.; Wang, J. Gentrification effects of China's urban village renewals. *Urban Stud.* **2017**, *54*, 214–229. [\[CrossRef\]](#)
6. Hao, P.; Sliuzas, R.; Geertman, S. The development and redevelopment of urban villages in Shenzhen. *Habitat Int.* **2011**, *35*, 214–224. [\[CrossRef\]](#)
7. Yuan, D.; Bao, H.; Yau, Y.; Skitmore, M. Case-Based Analysis of Drivers and Challenges for Implementing Government-Led Urban Village Redevelopment Projects in China: Evidence from Zhejiang Province. *J. Urban Plann. Dev.* **2020**, *146*, 05020014. [\[CrossRef\]](#)
8. Kochan, D. Placing the urban village: A spatial perspective on the development process of urban villages in contemporary China. *Int. J. Urban Reg. Res.* **2015**, *39*, 927–947. [\[CrossRef\]](#)
9. Chen, M.; Liu, W.; Lu, D. Challenges and the way forward in China's new-type urbanization. *Land Use Policy* **2016**, *55*, 334–339. [\[CrossRef\]](#)
10. Lai, S.-K.; Liu, H.-L.; Lan, I.C. Planning for urban redevelopment: A transaction cost approach. *Int. J. Urban Sci.* **2022**, *26*, 53–67. [\[CrossRef\]](#)
11. Eggertsson, P. *Economic Behavior and Institutions: Principles of Neoinstitutional Economics*; Cambridge University Press: Cambridge, UK, 1990.
12. Alchian, A.A.; Demsetz, H. The property right paradigm. *J. Econ. Hist.* **1973**, *33*, 16–27. [\[CrossRef\]](#)
13. Furubotn, E.G.; Pejovich, S. Property rights and economic theory: A survey of recent literature. *J. Econ. Lit.* **1972**, *10*, 1137–1162.
14. Ullrich, F. Relationships, Services and the Question of Ownership. In Proceedings of the 16th IMP Conference, Bath, UK, 7–9 September 2000; 2002.
15. North, D.C. *Institutions, Institutional Change and Economic Performance*; Cambridge University Press: New York, NY, USA, 1990.
16. Tian, L.; Zhu, J. Clarification of collective land rights and its impact on non-agricultural land use in the Pearl River Delta of China: A case of Shunde. *Cities* **2013**, *35*, 190–199. [\[CrossRef\]](#)
17. Choy, L.H.T.; Lai, Y.; Lok, W. Economic performance of industrial development on collective land in the urbanization process in China: Empirical evidence from Shenzhen. *Habitat Int.* **2013**, *40*, 184–193. [\[CrossRef\]](#)
18. Johnson, D.G. *Property Rights in Rural China*; Working paper; University of Chicago: Chicago, IL, USA, 1995.
19. He, S.; Liu, Y.; Wu, F.; Webster, C. Social Groups and Housing Differentiation in China's Urban Villages: An Institutional Interpretation. *Hous. Stud.* **2010**, *25*, 671–691. [\[CrossRef\]](#)
20. Liu, S.; Zhang, Y. Cities without slums? China's land regime and dual-track urbanization. *Cities* **2020**, *101*, 102652. [\[CrossRef\]](#)
21. Smith, N.R. Beyond top-down/bottom-up: Village transformation on China's urban edge. *Cities* **2014**, *41*, 209–220. [\[CrossRef\]](#)
22. Yuan, D.; Yau, Y.; Bao, H.; Lin, W. A Framework for Understanding the Institutional Arrangements of Urban Village Redevelopment Projects in China. *Land Use Policy* **2020**, *99*, 104998. [\[CrossRef\]](#)
23. Li, L.H.; Li, X. Redevelopment of urban villages in Shenzhen, China—An analysis of power relations and urban coalitions. *Habitat Int.* **2011**, *35*, 426–434.
24. Cho, C.J. An analysis of the housing redevelopment process in Korea through the lens of the transaction cost framework. *Urban Stud.* **2011**, *48*, 1477–1501. [\[CrossRef\]](#)
25. Williamson, O.E. *The Economic Institutions of Capitalism Firms Markets Relational Contracting*; Free Press: New York, NY, USA, 1985.
26. Alexander, E.R. Governance and transaction costs in planning systems: A conceptual framework for institutional analysis of land-use planning and development control—the case of Israel. *Environ. Plan. B Plan. Des.* **2001**, *28*, 755–776. [\[CrossRef\]](#)
27. Coase, R.H. The nature of the firm. *Economica* **1937**, *4*, 386–405. [\[CrossRef\]](#)
28. Demsetz, H. Toward a theory of property rights. *Am. Econ. Rev.* **1967**, *57*, 347–359.
29. Barzel, Y. *Economic Analysis of Property Rights*; Cambridge University Press: Cambridge, UK, 1989.
30. McCann, L.; Colby, B.; Easter, K.W.; Kasterine, A.; Kuperan, K.V. Transaction cost measurement for evaluating environmental policies. *Ecol. Econ.* **2005**, *52*, 527–542. [\[CrossRef\]](#)
31. Holloway, G.; Nicholson, C.; Delgado, C.; Staal, S.; Ehui, S. Agroindustrialization through institutional innovation Transaction costs, cooperatives and milk-market development in the east-African highlands. *Agric. Econ.* **2000**, *23*, 279–288. [\[CrossRef\]](#)
32. Bromley, D. *Environment and Economy*; Blackwell: Oxford, UK, 1991.
33. Matthews, R. The economics of institutions and the sources of growth. *Econ. J.* **1986**, *96*, 903–918. [\[CrossRef\]](#)
34. Furubotn, E.G.; Richter, R. *The New Institutional Economics: A Collection of Articles from the Journal of Institutional and Theoretical Economics*; Mohr Siebeck: Tübingen, Germany, 1991.
35. Ruiter, D.W.P. Is transaction cost economics applicable to public governance? *Eur. J. Law Econ.* **2005**, *20*, 287–303. [\[CrossRef\]](#)
36. Musole, M. Property rights, transaction costs and institutional change: Conceptual framework and literature review. *Prog. Plan.* **2009**, *71*, 43–85. [\[CrossRef\]](#)
37. Reeves, E. The practice of contracting in public private partnerships: Transaction costs and relational contracting in the Irish schools sector. *Public Adm.* **2008**, *86*, 969–986. [\[CrossRef\]](#)
38. Hastings, E.M.; Adams, D. Facilitating urban renewal: Changing institutional arrangements and land assembly in Hong Kong. *Prop. Manag.* **2005**, *23*, 110–121. [\[CrossRef\]](#)
39. Shahab, S.; Clinch, J.P.; O'Neill, E. Accounting for transaction costs in planning policy evaluation. *Land Use Policy* **2018**, *70*, 263–272. [\[CrossRef\]](#)
40. Williamson, O.E. *The Mechanisms of Governance*; Oxford University Press: New York, NY, USA, 1996.

41. Lai, Y.; Tang, B. Institutional barriers to redevelopment of urban villages in China: A transaction cost perspective. *Land Use Policy* **2016**, *58*, 482–490. [[CrossRef](#)]
42. Yuan, D.; Yau, Y.; Bao, H.; Liu, Y.; Liu, T. Anatomizing the Institutional Arrangements of Urban Village Redevelopment: Case Studies in Guangzhou, China. *Sustainability* **2019**, *11*, 3376. [[CrossRef](#)]
43. Yuan, D.; Yau, Y.; Hou, H.; Liu, Y. Factors Influencing the Project Duration of Urban Village Redevelopment in Contemporary China. *Land* **2021**, *10*, 707. [[CrossRef](#)]
44. Dawkins, C.J. Transaction costs and the land use planning process. *J. Plan. Lit.* **2000**, *14*, 507–518. [[CrossRef](#)]
45. Dudkin, G.; Vålilä, T. Transaction costs in public-private partnerships: A first look at the evidence. *EIB Econ. Financ. Rep.* **2005**, *3*, 2–44. [[CrossRef](#)]
46. Ball, M. Institutions in British property research: A review. *Urban Stud.* **1998**, *35*, 1501–1517. [[CrossRef](#)]
47. Buitelaar, E. A transaction-cost analysis of the land development process. *Urban Stud.* **2004**, *41*, 2539–2553. [[CrossRef](#)]
48. Zerbe Jr, R.O.; McCurdy, H. The end of market failure. *Regulation* **2000**, *23*, 10–14.
49. Zhao, Y.Q.; An, N.; Chen, H.L.; Tao, W. Politics of urban renewal: An anatomy of the conflicting discourses on the renovation of China's urban village. *Cities* **2021**, *111*, 10. [[CrossRef](#)]
50. Zhang, Z.T.; Liu, Y.; Liu, G.W. Rethinking growth coalition in urban village redevelopment: An empirical study of three villages in Zhuhai, China. *Habitat Int.* **2022**, *121*, 10. [[CrossRef](#)]
51. Arrow, K.J. The organization of economic activity: Issues pertinent to the choice of market versus nonmarket allocation. *Anal. Eval. Public Expend. PPB Syst.* **1969**, *1*, 59–73.
52. Williamson, O.E. Transaction cost economics: How it works; Where it is headed. *De Economist* **1998**, *146*, 23–58. [[CrossRef](#)]
53. Buitelaar, E. *The Cost of Land Use Decisions: Applying Transaction Cost Economics to Planning & Development*; Blackwell: Oxford, UK, 2007.
54. Williamson, O.E. The economics of organization: The transaction coas approach. *Am. J. Sociol.* **1981**, *87*, 548–577. [[CrossRef](#)]
55. Carr, J.B.; LeRoux, K.; Shrestha, M. Institutional ties, transaction costs, and external service production. *Urban Aff. Rev.* **2009**, *44*, 403–427. [[CrossRef](#)]
56. Zhuang, T.; Qian, Q.K.; Visscher, H.J.; Elsinga, M.G. An analysis of urban renewal decision-making in China from the perspective of transaction costs theory: The case of Chongqing. *J. Hous. Built Environ.* **2020**, *35*, 1177–1199. [[CrossRef](#)]
57. Rorstad, P.K.; Vatn, A.; Kvakkestad, V. Why do transaction costs of agricultural policies vary? *Agric. Econ.* **2007**, *36*, 1–11. [[CrossRef](#)]
58. Coggan, A.; Buitelaar, E.; Whitten, S.; Bennett, J. Factors that influence transaction costs in development offsets: Who bears what and why? *Ecol. Econ.* **2013**, *88*, 222–231. [[CrossRef](#)]
59. Simon, H. *Administrative Behaviour*; MacMillan: New York, NY, USA, 1957.
60. Carson, S.J.; Madhok, A.; Wu, T. Uncertainty, opportunism, and governance: The effects of volatility and ambiguity on formal and relational contracting. *Acad. Manag. J.* **2006**, *49*, 1058–1077. [[CrossRef](#)]
61. Ali, Z.; Zhu, F.; Hussain, S. Identification and Assessment of Uncertainty Factors that Influence the Transaction Cost in Public Sector Construction Projects in Pakistan. *Buildings* **2018**, *8*, 157. [[CrossRef](#)]
62. de Jong, M.; Chen, Y.W.; Joss, S.; Lu, H.Y.; Zhao, M.X.; Yang, Q.H.; Zhang, C.N. Explaining city branding practices in China's three mega-city regions: The role of ecological modernization. *J. Clean. Prod.* **2018**, *179*, 527–543. [[CrossRef](#)]
63. Lai, Y.; Zhang, X. Redevelopment of industrial sites in the Chinese 'villages in the city': An empirical study of Shenzhen. *J. Clean. Prod.* **2016**, *134*, 70–77. [[CrossRef](#)]
64. Lin, G.C.S.; Zhang, A.Y. Emerging spaces of neoliberal urbanism in China: Land commodification, municipal finance and local economic growth in prefecture-level cities. *Urban Stud.* **2014**, *52*, 2774–2798. [[CrossRef](#)]
65. Galletta, A. *Mastering the Semi-Structured Interview and Beyond: From Research Design to Analysis and Publication*; NYU Press: New York, NY, USA, 2013.
66. Yuan, D.; Yau, Y.; Li, R. Urban village renewal in China: From state-led to self-organized land readjustment. In *Urban Planning and Renewal*; Wolfe, M., Ed.; Nova Science Publishers: New York, NY, USA, 2017.
67. Yuan, D.; Yau, Y.; Bao, H. Institutional innovation for urban village renewal in mainland China. In *Handbook of Research on Rural Sociology and Community Mobilization for Sustainable Growth*; Yasser, Q.R., Ed.; Information Science Reference: Hershey, PA, USA, 2019.